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IN THE CLAIMS

Please amend Claims 1, 5, 10 and 20 as follows:

1. (Currently Amended) A fixture for calibrating an instrumented fastener comprising:
 - an upper member;
 - a cap member removably attached to the upper member, the cap member including an opening formed therein to receive an upper portion of the fastener;
 - a lower member positioned adjacent the cap member to define a joint, the lower member including an opening formed therein;
 - a removable insert positioned in the lower member opening to receive a lower portion of the fastener
2. (Original) The fixture of claim 1 wherein the cap includes a joint specific spacer section to provide a predetermined position of the fastener within the fixture.
3. (Original) The fixture of claim 1 wherein the upper member includes a threaded extension for threaded attachment to the cap member.
4. (Original) The fixture of claim 3 wherein the upper member includes a chamber formed therein for receiving the upper portion of the fastener.

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5. (Currently Amended) The fixture of claim 4 wherein the upper member further includes a port formed therein, the port allowing a cable access to the upper member chamber.

6. (Original) The fixture of claim 1 wherein the cap member opening is a threaded opening.

7. (Original) The fixture of claim 1 wherein the cap member opening is an unthreaded opening.

8. (Original) The fixture of claim 1 wherein the lower member opening is a threaded opening.

9. (Original) The fixture of claim 1 wherein the lower member further includes a chamber formed therein.

10. (Currently Amended) The fixture of claim 1 wherein the lower member further includes a port formed therein, the port allowing a cable access to the lower member chamber.

11. (Original) The fixture of claim 8 wherein the removable insert includes a threaded outer portion for threaded engagement with the lower member opening.

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12. (Original) The fixture of claim 11 wherein the removable insert includes a threaded opening, the threaded opening including a configuration adapted to threadably engage the lower portion of the fastener.

13. (Original) The fixture of claim 12 wherein the removable insert is one of a plurality of removable inserts, each of which include a threaded opening adapted to threadably engage a fastener with a different engaging configuration.

14. (Original) The fixture of claim 1 wherein the upper member and the cap member comprise an upper section.

15. (Original) The fixture of claim 14 wherein the lower member and the removable insert comprise a lower section.

16. (Original) The fixture of claim 15 wherein the upper section and the lower section each include an attachment portion.

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17. (Original) A method comprising:
 - positioning a fiber-optic sensor within a fastener;
 - positioning a removable insert member within a lower member of a calibration fixture;
 - positioning a cap member adjacent to the removable insert member;
 - inserting the fastener through an opening in the cap member;
 - screwing a lower threaded portion of the fastener into the threaded insert member;
 - attaching the cap member to an upper section of the calibration fixture;
 - operably connecting the fiber-optic sensor to a measuring device;
 - applying a predetermined tensile force to the fastener; and
 - recording a measurement from the fiber-optic sensor.
18. (Original) The method of claim 17 wherein the predetermined tensile force is applied to the fastener by applying a tensile force to the upper and lower members of the calibration fixture.

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19. (Original) A system for calibrating an instrumented fastener comprising:
- means for positioning a fiber-optic sensor within a fastener;
 - means for positioning a removable insert member within a lower section of a calibration fixture;
 - means for positioning a cap member adjacent to the removable insert member;
 - means for inserting the fastener through the cap member;
 - means for securing a lower threaded portion of the fastener within the threaded insert member;
 - means for attaching the cap member to an upper section of the calibration fixture;
 - means for operably connecting the fiber-optic sensor to a measuring device;
 - means for applying a predetermined tensile force to the fastener;
 - and
 - means for recording a measurement from the fiber-optic sensor.

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20. (Currently Amended) A system for calibrating an instrumented fastener comprising:

- an upper assembly adapted to receive an upper portion of the fastener;
- a lower assembly adapted to receive a lower portion of the fastener, the upper assembly adjacent the lower assembly to define a joint; and
- means for attaching the upper and lower assemblies to a tension-producing device, wherein the application of a predetermined tensile force by the tension-producing device across the upper and lower assemblies produces a strain in the fastener detectable by the instrument.